

NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION

LAKE TROPHIC DATA

MORPHOMETRIC:

LAKE <u>Abeniki Lake</u>	LAKE AREA (HA) <u>7.49</u>
TOWN <u>Dixville</u>	MAXIMUM DEPTH (M) <u>7.6</u>
COUNTY <u>Coos</u>	MEAN DEPTH (M) _____
RIVER BASIN <u>Connecticut</u>	VOLUME (M ³) _____
LATITUDE <u>44 ° 53'N</u>	MUD SURFACE AREA (HA) _____
LONGITUDE <u>71 ° 18'W</u>	RELATIVE DEPTH <u>2.5</u>
ELEVATION (FT) <u>2231</u>	SHORE CONFIGURATION <u>1.13</u>
SHORE LENGTH (M) <u>1100</u>	AREAL WATER LOAD (M/YR) _____
WATERSHED AREA (HA) <u>310.8</u>	FLUSHING RATE (YR ⁻¹) _____
% WATERSHED PONDED <u>0%</u>	PHOSPHORUS RETENTION COEFF. _____

BIOLOGICAL:

DATE

9 SEP 1980

DOM. PHYTOPLANKTON (% total) ¹

Chrysosphaerella (95%)

²

NUMBER OF ALGAL GENERA

3

SPECIES DIVERSITY

CHLOROPHYLL a (µg/L)

2.53

DOM. ZOOPLANKTON (% total) ¹

Holopedium (85%)

²

ROTIFERS/LITER

13

MICROCRUSTACEA/LITER

80

TOTAL ZOOPLANK. CNTS (cells/L)

93

VASCULAR PLANT ABUNDANCE

Sparse

DOMINANT VASCULAR PLANTS ¹

Ranunculus

²

³

SECCHI DISK TRANSPARENCY (M)

1.8 VOB

BOTTOM DISS. OXYGEN (mg/L)

9.5

SEDIMENT: % ORGANIC MATTER

LAKE TYPE:

An artificial pond.

SUMMER THERMAL STRATIFICATION: YES _____ NO X WEAK _____

IF YES, VOLUME OF HYPOLIMNION _____ (m³) THERMOCLINE DEPTH _____ (m)

CHEMICAL: (mg/L unless indicated otherwise) LAKE: Abeniki Lake

	WINTER		SUMMER		
DATE			9 SEP 1980		
DEPTH (M)			1.2		
pH (UNITS)			6.6		
ALKALINITY (I. P.)					
ALKALINITY (F.E.P.)			11.1		
NITRITE+NITRATE NITROGEN			0.15		
TOTAL KJELDAHL NITROGEN			0.45		
TOTAL PHOSPHORUS			0.038		
SPEC. CONDUCT. (μ Mhos/cm)			37		
APPARENT COLOR (UNITS)					
TRUE COLOR (440 nm)(UNITS)					
MAGNESIUM			0.68		
CALCIUM			4.0		
SODIUM					
POTASSIUM					
CHLORIDE					
TN : TP					
INORG-N : INORG-P					
[Mg+Ca] : [Na+K]					
CALCITE SATURATION INDEX					

* = NOT DEFENSIBLE

NR = NO RESULT

TROPHIC CLASSIFICATION: 1980

CLASSIFICATION POINTS:

D.O.	S.D.	PLANT ABUND.	CHL a	TOTAL PTS.	TROPHIC CLASS.
-	1	0	0	1	Oligo.

COMMENTS:

1. Also spelled Abenike.
2. A private pond, owned by the Balsams Hotel. No public access.
3. This artificial pond has filled in with rooted aquatic plants. Only about 3 or 4 acres of open water remains from the original 19 acres.
4. This pond was sampled cooperatively with Fish and Game personnel during a fish study. No winter sampling was conducted and no depth soundings were taken.
5. Aluminum (total) was 0.10 mg/L.

NO BATHYMETRIC MAP IS AVAILABLE FOR
ABENIKI LAKE

FIELD DATA SHEET

WATER BODY Abeniki Lake TOWN Dixville BY WSPCC; F&G
DATE COLLECTED 9 September 1980 WEATHER Cool & breezy; light clouds

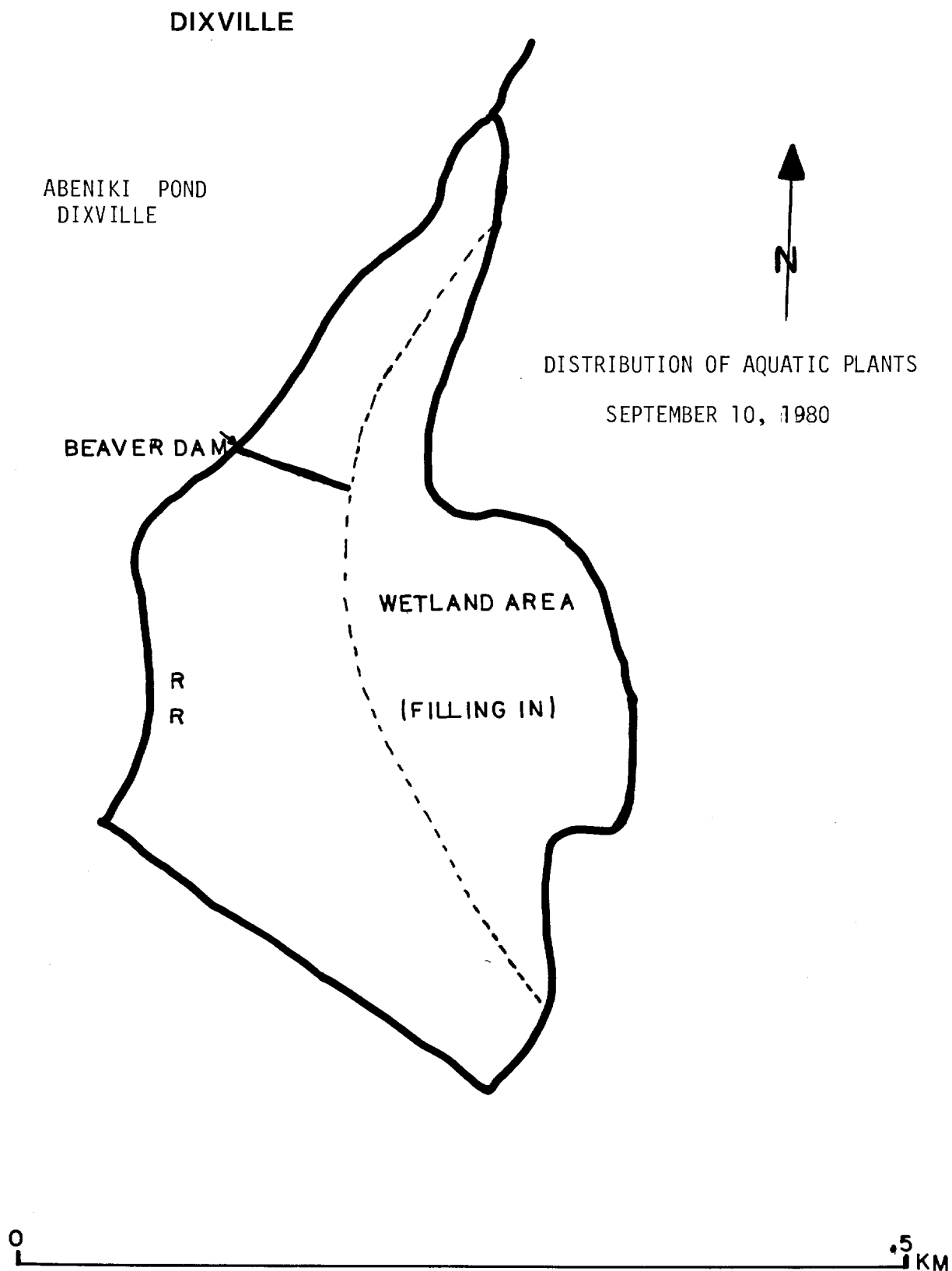
STATION	DEPTH (M)	TEMP. (°C)	*DISSOLVED OXYGEN	OXYGEN: % SATURATION			
DEEP SPOT	0.1	12.2	9.5	90%			
	1.0	11.0	9.5	88%			
	1.2	10.2	9.5	86%			

SECCHI DISK (M) 1.8 V.O.BBOTTOM DEPTH (M) 1.8TIME 1030 hrs.

COMMENTS: 1. Secchi disk was
visible on bottom at
1.8 meters.

* Dissolved oxygen values in mg/L

ABENIKI LAKE



[illegible]

WSPCC+F+G

[illegible]

OVERALL ABUNDANCE Sparse

Most of the pond has grown into a small marsh area-originally about 19 acres the pond covers only 3-4 acres at present.